

IN THE CLAIMS:

1. (Currently Amended) A vaso-occlusive composition comprising a vaso-occlusive coil; and a bioactive material comprising a combination of two or more materials selected from the group consisting of (1) fibrin; (2) polyethylene glycol derivatives; (3) thrombin-coated gelatin granules; (4) balloons coated with iron microspheres; (5) trace metals, and (6) thrombus-stabilizing molecules; and combinations thereof, wherein combinations of bioactive materials are not contained in separate layers.

2 - 4. (Previously Cancelled)

5. (Withdrawn) The composition of claim 1, wherein the material comprises a trace metal.

6. (Withdrawn) The composition of claim 5, wherein the trace metal comprises copper.

7. (Currently Amended) The composition of claim 1, wherein one of the materials of the bioactive material comprises a thrombus-stabilizing molecule.

8. (Original) The composition of claim 7, wherein the thrombus-stabilizing molecule is Factor XIII or functional fragments thereof.

9. (Original) The composition of claim 7, wherein the thrombus-stabilizing molecule is plasminogen activator inhibitor-1 (PAI-1) or functional fragments thereof.

10. (Original) The composition of claim 7, wherein the thrombus-stabilizing molecule is α_2 -antiplasmin or functional fragments thereof.

11. (Previously Presented) The composition of claim 1, wherein the material is adsorbed to the vaso-occlusive coil.

12 - 13. (Previously Cancelled)

14. (Previously Presented) The composition of claim 1, wherein the vaso-occlusive coil is plasma treated.

15. (Previously Presented) The composition of claim 1, wherein the vaso-occlusive coil is subjected to ion implantation.

16. (Previously Presented) The composition of claim 1, wherein the vaso-occlusive coil is microtextured.

17 - 18. (Previously Cancelled)

19. (Original) A method of occluding a vessel comprising administering to a subject in need thereof a vaso-occlusive composition according to claim 1.

20 - 21. (Previously Cancelled)

22. (Withdrawn) The method of claim 19, wherein the trace metal is copper.

23. (Original) The method of claim 19, wherein the thrombus-stabilizing molecule is selected from the group consisting of Factor XIII, α -antiplasmin, plasminogen activator inhibitor-1 (PAI-1), combinations thereof and functional fragments thereof.

24. (Original) The method of claim 19, wherein the vessel is an aneurysm.

25 - 30. (Previously Cancelled)

31. (Withdrawn) A vaso-occlusive composition comprising a vaso-occlusive coil, a liquid embolic material and an additional bioactive material selected from the group consisting of DNA; RNA; functional fragments of DNA, RNA, or cytokines; and combinations thereof, wherein at least one of the bioactive materials is attached to the vaso-occlusive coil.

32. (Withdrawn) The vaso-occlusive composition of claim 31, wherein the liquid embolic material is particulate material selected from the group consisting of microspheres, granulates and beads.

33. (Previously canceled).

34. (Withdrawn): The vaso-occlusive composition of claim 31, wherein the vaso-occlusive coil is absorbable.

35. (Withdrawn): The vaso-occlusive composition of claim 32, wherein the particulate material is absorbable.

36. (Withdrawn): A method of occluding a vessel comprising administering to a subject in need thereof a vaso-occlusive composition according to claim 31.

37. (Withdrawn): A vaso-occlusive composition comprising
a vaso-occlusive member selected from the group consisting of one or more vaso-occlusive coils, one or more filters, one or more retention devices and combinations thereof; and thrombin-coated gelatin granules or balloons coated with iron microspheres.